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O'Keefe, Denise S.

<120> DNA Encoding the Prostate-Specific Membrane Antigen-Like Gene and Uses Thereof

<130> D6230

<140> USSN 09/973,382
<141> 2001-10-09

<150> PCT/US00/09417

<151> 2000-04-09

<160> 38

RECEIVED

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SEP 10 2003

<211> 1992

<212> DNA

<213> *Homo sapiens*

TECH CENTER 1600/2900

<220>

<223> cDNA sequence of PSMA-like gene

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35 40 45
Arg Ile Tyr Asn Val Ile Gly Thr Leu Arg Gly Ala Val Glu Pro
50 55 60
Asp Arg Tyr Val Ile Leu Gly Gly His Arg Asp Ser Trp Val Phe
65 70 75
Gly Gly Ile Asp Pro Gln Ser Gly Ala Ala Val Val His Glu Thr
80 85 90
Val Arg Ser Phe Gly Thr Leu Lys Glu Gly Trp Arg Pro Arg
95 100 105
Arg Thr Ile Leu Phe Ala Ser Trp Asp Ala Glu Glu Phe Gly Leu
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Leu Gly Ser Thr Glu Trp Ala Glu Asp Asn Ser Arg Leu Leu Gln
125 130 135

Glu Arg Gly Val Ala Tyr Ile Asn Ala Asp Ser Ser Ile Glu Gly
140 145 150
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155 160 165
Val Tyr Asn Leu Thr Lys Glu Leu Lys Ser Pro Asp Glu Gly Phe
170 175 180
Glu Gly Lys Ser Leu Tyr Glu Ser Trp Thr Lys Lys Ser Pro Ser
185 190 195
Pro Glu Phe Ser Gly Met Pro Arg Ile Ser Lys Leu Gly Ser Gly
200 205 210
Asn Asp Phe Glu Val Phe Phe Gln Arg Leu Gly Ile Ala Ser Gly
215 220 225
Arg Ala Arg Tyr Thr Lys Asn Trp Glu Thr Asn Lys Phe Ser Gly
230 235 240
Tyr Pro Leu Tyr His Ser Val Tyr Glu Thr Tyr Glu Leu Val Glu
245 250 255
Lys Phe Tyr Asp Pro Met Phe Lys Tyr His Leu Thr Val Ala Gln
260 265 270
Val Arg Gly Gly Met Val Phe Glu Leu Ala Asn Ser Ile Val Leu
275 280 285
Pro Phe Asp Cys Arg Asp Tyr Ala Val Val Leu Arg Lys Tyr Ala
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Asp Lys Ile Tyr Asn Ile Ser Met Lys His Pro Gln Glu Met Lys
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Thr Tyr Ser Leu Ser Phe Asp Ser Leu Phe Ser Ala Val Lys Asn
320 325 330
Phe Thr Glu Ile Ala Ser Lys Phe Ser Glu Arg Leu Gln Asp Phe
335 340 345
Asp Lys Ser Asn Pro Ile Leu Leu Arg Met Met Asn Asp Gln Leu
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Met Phe Leu Glu Arg Ala Phe Ile Asp Pro Leu Gly Leu Pro Asp
365 370 375
Arg Pro Phe Tyr Arg His Val Ile Tyr Ala Pro Ser Ser His Asn
380 385 390

Lys Tyr Ala Gly Glu Ser Phe Pro Gly Ile Tyr Asp Ala Leu Phe
 395 400 405
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35	40	45
Ser Asn Glu Ala Thr Asn Ile Thr Pro Lys His Asn Met Lys Ala		
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Asn	Lys	Thr	His	Pro	Asn	Tyr	Ile	Ser	Ile	Ile	Asn	Glu	Asp	Gly
									125		130			135
Asn	Glu	Ile	Phe	Asn	Thr	Ser	Leu	Phe	Glu	Pro	Pro	Pro	Pro	Gly
									140		145			150
Tyr	Glu	Asn	Val	Ser	Asp	Ile	Val	Pro	Pro	Phe	Ser	Ala	Phe	Ser
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Pro	Gln	Gly	Met	Pro	Glu	Gly	Asp	Leu	Val	Tyr	Val	Asn	Tyr	Ala
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Cys	Ser	Gly	Lys	Ile	Val	Ile	Ala	Arg	Tyr	Gly	Lys	Val	Phe	Arg
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Gly	Asn	Ile	Leu	Asn	Leu	Asn	Gly	Ala	Gly	Asp	Pro	Leu	Thr	Pro
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Ala	Val	Gly	Leu	Pro	Ser	Ile	Pro	Val	His	Pro	Ile	Gly	Tyr	Tyr
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365 370 375
Gly His Arg Asp Ser Trp Val Phe Gly Gly Ile Asp Pro Gln Ser
380 385 390
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Lys Lys Glu Gly Trp Arg Pro Arg Arg Thr Ile Leu Phe Ala Ser
410 415 420
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455 460 465
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470 475 480
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485 490 495
Ser Trp Thr Lys Lys Ser Pro Ser Pro Glu Phe Ser Gly Met Pro
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Arg Ile Ser Lys Leu Gly Ser Gly Asn Asp Phe Glu Val Phe Phe
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Ala	Val	Val	Leu	Arg	Lys	Tyr	Ala	Asp	Lys	Ile	Tyr	Ser	Ile	Ser
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Ile	Tyr	Ala	Pro	Ser	Ser	His	Asn	Lys	Tyr	Ala	Gly	Glu	Ser	Phe
695									700					705
Pro	Gly	Ile	Tyr	Asp	Ala	Leu	Phe	Asp	Ile	Glu	Ser	Lys	Val	Asp
710									715					720
Pro	Ser	Lys	Ala	Trp	Gly	Glu	Val	Lys	Arg	Gln	Ile	Tyr	Val	Ala
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<210> 9
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regions of the PSMA-like gene (exon 11)

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clone used to amplify the corresponding
regions of the PSMA-like gene (exon 12)

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clone used to amplify the corresponding
regions of the PSMA-like gene (exon 12)

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clone used to amplify the corresponding regions of the PSMA-like gene (exon 13)

<400> 25
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<210> 26
<211> 22
<212> DNA
<213> Artificial sequence

<220>
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<223> antisense oligonucleotide primer based upon intronic sequences of the PSMA genomic clone used to amplify the corresponding regions of the PSMA-like gene (exon 13)

<400> 26
gatgctacta atgggctacc tc 22

<210> 27
<211> 22
<212> DNA
<213> Artificial sequence

<220>
<221> primer_bind
<223> sense oligonucleotide primer based upon intronic sequences of the PSMA genomic clone used to amplify the corresponding regions of the PSMA-like gene (exon 14)

<400> 27
cttctggta atggacatct ag 22

<210> 28
<211> 22
<212> DNA
<213> Artificial sequence

<220>
<221> primer_bind
<223> antisense oligonucleotide primer based upon intronic sequences of the PSMA genomic clone used to amplify the corresponding regions of the PSMA-like gene (exon 14)

<400> 28
caatcccaca ctgaattcag tg 22

<210> 29
<211> 22
<212> DNA
<213> Artificial sequence

<220>
<221> primer_bind
<223> sense oligonucleotide primer based upon
intronic sequences of the PSMA genomic
clone used to amplify the corresponding
regions of the PSMA-like gene (exon 15)

<400> 29
agaatgggtt ttagtttaat gg 22

<210> 30
<211> 21
<212> DNA
<213> Artificial sequence

<220>
<221> primer_bind
<223> antisense oligonucleotide primer based upon
intronic sequences of the PSMA genomic
clone used to amplify the corresponding
regions of the PSMA-like gene (exon 15)

<400> 30
tgagtcactt tttggagtca g 21

<210> 31
<211> 22
<212> DNA
<213> Artificial sequence

<220>
<221> primer_bind
<223> sense oligonucleotide primer based upon
intronic sequences of the PSMA genomic
clone used to amplify the corresponding
regions of the PSMA-like gene (exons 16-17)

<400> 31
ttgtaagcta tccctataag ag 22

<210> 32
<211> 22

<212> DNA
<213> Artificial sequence

<220>
<221> primer_bind
<223> antisense oligonucleotide primer based upon intronic sequences of the PSMA genomic clone used to amplify the corresponding regions of the PSMA-like gene (exons 16-17)

<400> 32
agttcagcaa cagtcatgtt ag 22

<210> 33
<211> 22
<212> DNA
<213> Artificial sequence

<220>
<221> primer_bind
<223> sense oligonucleotide primer based upon intronic sequences of the PSMA genomic clone used to amplify the corresponding regions of the PSMA-like gene (exon 18)

<400> 33
gggtggtcct gaaacccaatc cc 22

<210> 34
<211> 21
<212> DNA
<213> Artificial sequence

<220>
<221> primer_bind
<223> antisense oligonucleotide primer based upon intronic sequences of the PSMA genomic clone used to amplify the corresponding regions of the PSMA-like gene (exon 18)

<400> 34
gtgatattac agaaaaggagt c 21

<210> 35
<211> 22
<212> DNA
<213> Artificial sequence

<220>

<221> primer_bind
<223> sense oligonucleotide primer based upon
intronic sequences of the PSMA genomic
clone used to amplify the corresponding
regions of the PSMA-like gene (exon 19)

<400> 35
atccaggaat tgcagagtgc tc 22

<210> 36
<211> 22
<212> DNA
<213> Artificial sequence

<220>
<221> primer_bind
<223> antisense oligonucleotide primer based upon
intronic sequences of the PSMA genomic
clone used to amplify the corresponding
regions of the PSMA-like gene (exon 19)

<400> 36
ttcagttta atccataggg ag 22

<210> 37
<211> 24
<212> DNA
<213> Artificial sequence

<220>
<221> primer_bind
<223> sense primer (exon 10) used for performing
PCR on cDNAs from various tissues

<400> 37
acagatatgt cattctggga ggtc 24

<210> 38
<211> 24
<212> DNA
<213> Artificial sequence

<220>
<221> primer_bind
<223> antisense primer (exon 16) used for
performing PCR on cDNAs from various
tissues

<400> 38
actgtgatac agtggatagc cgct 24